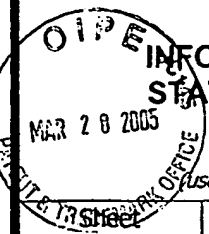


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Substitute for form 1449A/PTO				Complete if Known	
 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				APPLICATION NUMBER	10/645,306
				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1763 1732
				Examiner Name	Unassigned TENTONI
				Attorney Docket Number	P86-28-03
1	of	6			

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			

LBT	B1	6,234,379	B1	Donges	5/22/2001	
	B2	6,309,580	B1	Chou	10/30/2001	
	B3	6,391,217	B2	Schaffer et al.	5/21/2002	
	B4	6,696,220	B2	Bailey et al.	2/24/2004	
	B5	2004/0007799	A1	Choi et al.	1/15/2004	
	B6	2004/0021254	A1	Sreenivasan et al.	2/5/2004	
	B7	2004/0021866	A1	Watts et al.	2/5/2004	
	B8	2004/0022888	A1	Sreenivasan et al.	2/5/2004	
	B9	2002/0177319	A1	Chou	11/28/2002	
	B10	6,713,238	B1	Chou et al.	3/30/2004	
	B11	2004/0008334	A1	Sreenivasan et al.	1/15/2004	
	B12	2004/0009673	A1	Sreenivasan et al.	1/15/2004	
	B13	2004/0124566	A1	Sreenivasan et al.	7/1/2004	
	B14	6,646,662	B1	Nebashi et al.	11/11/2003	
	B15	6,776,094	B1	Whitesides et al.	8/17/2004	
	B16	6,518,189	B1	Chou	2/11/2003	
✓	B17	2002/0132482	A1	Chou	9/19/2002	
LBT	B18	2002/0167117	A1	Chou	11/14/2002	

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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				APPLICATION NUMBER	10/645,306
				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1763 1732
				Examiner Name	Unassigned TENTONI
				Attorney Docket Number	P86-28-03
Sheet	2	of	6		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

LBT	B19	6,482,742	B1	Chou	11/19/2002	
	B20	2003/0080471	A1	Chou	5/1/2003	
	B21	2004/0036201	A1	Chou et al.	2/26/2004	
	B22	2004/0192041	A1	Jeong et al.	9/30/2004	
	B23	6,753,131	B1	Rogers et al.	6/22/2004	
	B24	6,828,244	B2	Chou	12/7/2004	
	B25	6,809,356	B2	Chou	10/26/2004	
	B26	2004/0197843	A1	Chou et al.	10/7/2004	
	B27	2004/0156108	A1	Chou et al.	8/12/2004	
	B28	2004/0137734	A1	Chou et al.	7/15/2004	
	B29	2004/0131718	A1	Chou et al.	7/8/2004	
	B30	2004/0118809	A1	Chou et al.	6/24/2004	
	B31	2004/0046288	A1	Chou	3/11/2004	
	B32	2003/0080472	A1	Chou	5/1/2003	
	B33	2003/0034329	A1	Chou	2/20/2003	
	B34	2002/0042027	A1	Chou et al.	4/11/2002	
✓	B35	2004/0170771	A1	Bailey et al.	9/2/2004	
LBT	B36	6,580,172	B2	Mancini et al.	6/17/2003	

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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				APPLICATION NUMBER	10/645,306
				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1763 1732
				Examiner Name	Unassigned TENTONI
				Attorney Docket Number	P86-28-03
Sheet	4	of	6		

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
		Office 2	Number ⁴	Kind Code ⁵ (if known)				

LBT	B45	WO	00/21689	A1	Chou et al.	4/20/2000		
	B46	JP	02-92603	A	Kurikawa et al.	4/3/1990		
	B47	JP	02-24848	A	Kamio	1/26/1990		
	B48	WO	01/47003	A2	Steiner et al.	6/28/2001		
	B49	WO	02/07199	A1	Chou	1/24/2002		
	B50	WO	2004/114016	A2	Chou et al.	12/29/2004		
	B51	WO	99/05724	A1	Chou et al.	2/4/1999		
	B52	WO	03/010289	A2	Chou et al.	2/6/2003		
↓	B53	WO	03/079416	A1	Chou	9/25/2003		
LBT	B54	WO	03/099536	A1	Chou et al.	12/4/2003		

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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Substitute for form 1449A/PTO				Complete if Known	
				APPLICATION NUMBER	10/645,306
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
(use as many sheets as necessary)				Group Art Unit	1763 1732
				Examiner Name	Unassigned TENTIONI
Sheet	5	of	6	Attorney Docket Number	P86-28-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

LBT	B55	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000.	—
	B56	Johnson et al., Advances in Step and Flash Imprint Lithography, SPIE Microlithography Conference, 2/23/2003.	—
	B57	Heidari, Nanoimprint Lithography at the 6 in. Wafer Scale, J. Vac. Sci. Technol. B 18(6), pp. 3557 - 3560, 11/1/2000.	—
	B58	Translation of Japanese Patent 02-92603 (APRIL 3, 1990).	—
	B59	Translation of Japanese Patent 02-24848 (JANUARY 26, 1990).	—
	B60	Chou et al., Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Vol. 417, (June 2002), pp. 835-837, 6/1/2002,	—
	B61	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technology B 14(16), pp. 4129-4133, 11/1/1996,	—
↓	B62	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001,	—
LBT	B63	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol. b. 19(6), 11/1/2001,	—

Examiner Signature	LEO B. TENTIONI	Date Considered	08/02/2005
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				APPLICATION NUMBER	10/645,306
				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1763 1732
Sheet	6	of	6	Examiner Name	Unassigned TENTONI
				Attorney Docket Number	P86-28-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

LBT	B64	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001.	—
LBT	B65	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000.	—
LBT	B66	Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers (UNDATED).	—

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
APPLICATION NUMBER				10/645,306	
FILING DATE				08/21/2003	
FIRST NAMED INVENTOR				Choi et al.	
Group Art Unit				1732	
Examiner Name				Tentoni, Leo B.	
Attorney Docket Number				PB6-28-03	

[illegible]

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				APPLICATION NUMBER	10/645,306
				FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1732
				Examiner Name	Tentoni, Leo B.
Attorney Docket Number	P86-28-03				
Sheet	2	of	2		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

LBT	C7	SHIBUCHI ET AL., Super Water- and Oil-Repellent Surfaces Resulting from Fractal Structure, Journal of Colloid and Interface Science, Vol. 208, no. 1, pp. 287-294 12/1/1998,	—
	C8	APPLICATION NO. 11/126,946, naming Inventors Choi et al., entitled Formation of Discontinuous Films During an Imprint Lithography Process, filed 5/11/2005,	—
↓	C9	APPLICATION NO. 11/127,041, naming Inventors Sreenivasan et al., entitled Step and Repeat Imprint Lithography Processes, filed 5/11/2005,	—
LBT	C10	APPLICATION NO. 11/127,060, naming Inventors Sreenivasan et al., entitled Step and Repeat Imprint Lithography Systems, filed 5/11/2005,	—

Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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				Application Number	10/645,306
				Filing Date	08/21/2003
				First Named Inventor	Choi et al.
				Group Art Unit	1763 1732
				Examiner Name	Unassigned TENTON
Sheet	2	of	5	Attorney Docket Number	P86/MII-46-28-03

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Examiner Signature	LEO B. TENTONI	Date Considered	08/02/2005
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.



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Substitute for form 1449B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/645,306
				Filing Date	08/21/2003
				First Named Inventor	Choi et al.
				Group Art Unit	1703 1732
				Examiner Name	Unassigned TENTONI
Sheet	3	of	5	Attorney Docket Number	P86/MII-46-28-03

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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LBT	A32	COWIE, "Polymers: Chemistry and Physics of Modern Materials," 1991, pp. 408-409, 2 nd Ed, Chapman and Hall, a division of Routledge, Chapman and Hall, Inc., 29 West 35 th Street, NY, NY 10001-2291.	—
	A33	KRUG et al., "Fine Patterning of Thin Sol-Gel Films," Journal of Non-Crystalline Solids, 1992, pp. 447-450, vol. 147 & 148.	—
	A34	Kotachi et al., "Si-Containing Positive Resist for ArF Laser Lithography," J. Photopolymer Sci. Tech. 8(4) 615-622, 1995.	—
	A35	Krauss et al., "Fabrication of Nanodevices Using Sub-25nm Imprint Lithography," Appl. Phys. Lett 67(21), 3114-3116, 1995.	—
	A36	CHOU et al., "Imprint of Sub-25 nm Vias and Trenches in Polymers," Applied Physics Letters, November 20, 1995, pp. 3114-3116, vol. 67(21).	—
	A37	CHOU et al., "Imprint Lithography with 25-Nanometer Resolution," Science, Apr. 5, 1996, pp. 85-87, vol. 272.	—
	A38	HAISMA et al., "Mold-Assisted Nanolithography: A Process for Reliable Pattern Replication," Journal of Vacuum Science and Technology, Nov/Dec 1996, pp. 4124-4128, vol. B 14(6).	—
	A39	CHOU et al., "Imprint Lithography with Sub-10nm Feature Size and High Throughput," Microelectronic Engineering, 1997, pp. 237-240, vol. 35.	—
	A40	SCHEER et al., "Problems of the Nanoimprinting Technique for Nanometer Scale Pattern Definition," Journal of Vacuum Science and Technology, Nov/Dec 1998, pp. 3917-3921, vol. B 16(6).	—
	A41	XIA et al., "Soft Lithography," Annu. Rev. Mater. Sci., 1998, pp. 153-184, vol. 28.	—
LBT	A42	XIA et al., "Soft Lithography," Agnew. Chem. Int. Ed., 1998, pp. 550-575, vol. 37.	—

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		Filing Date	08/21/2003
		First Named Inventor	Choi et al.
		Group Art Unit	4763 TENTONI 1732
		Examiner Name	Unassigned TENTONI
Sheet 4 of 5	Attorney Docket Number	P86/MII-46-28-03	

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LBT	A43	WU et al., "Large Area High Density Quantized Magnetic Disks Fabricated Using Nanoimprint Lithography," Journal of Vacuum Science and Technology, Nov/Dec 1998, pp. 3825-3829, vol. B 16(6).	—
	A44	COLBURN. et al., "Step and Flash Imprint Lithography: A New Approach to High-Resolution Patterning", Proc. of SPIE, 1999, pp. 379-389, vol. 3676.	—
	A45	CHOU et al., "Lithographically-Induced Self Assembly of Periodic Polymer Micropillar Arrays," Journal of Vacuum Science and Technology, Nov/Dec 1999, pp. 3197-3202, vol. B 17(6).	—
	A46	RUCHHOEFT et al., "Patterning Curved Surfaces: Template Generation by Ion Beam Proximity Lithography and Relief Transfer by Step and Flash Imprint Lithography," Journal of Vacuum Science and Technology, 1999, pp. 2965-2982, vol. 17.	—
	A47	CHOI et al., "Design of Orientation Stages for Step and Flash Imprint Lithography," Precision Engineering, Journal of the International Societies for Precision Engineering and Nanotechnology, 2001, pp. 192-199, vol. 25.	—
	A48	CHOU, "Nanoimprint Lithography and Lithographically Induced Self-Assembly," MRS Bulletin, July 2001, pp. 512-517.	—
	A49	MIRKIN et al., "Emerging Methods for Micro-and Nanofabrication," MRS Bulletin, July 2001, pp. 506-509	—
	A50	CHOI et al., "High Precision Orientation Alignment and Gap Control Stages for Imprint Lithography Processes," U.S. Patent Application 09/698,317, Filed with USPTO on October 27, 2000.	—
	A51	BENDER M. et al., "Fabrication of Nanostructures using a UV-based Imprint Technique," Microelectronic Engineering, pp 223-236, 2000.	—
↓	A52	SREENIVASAN et al., "High-Resolution Overlay Alignment Methods and Systems for Imprint Lithography," U.S. Patent Application 09/907,512, Filed with USPTO on July 16, 2001.	—
LBT	A53	CHOI et al., "Method and System of Automatic Fluid Dispensing for Imprint Lithography Processes," U.S. Patent Application 09/908,455, Filed with USPTO on July 17, 2001.	—

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LBT	A54	CHOI et al., "Methods for High-Precision Gap and Orientation Sensing Between a Transparent Template and Substrate for Imprint Lithography," U.S. Patent Application 09/920,341, Filed with USPTO on August 1, 2001.	—
	A55	Nguyen, A. Q., "Asymmetric Fluid-Structure Dynamics in Nanoscale Imprint Lithography," University of Texas at Austin, August 2001.	—
	A56	BAILEY et al., "Template for Room Temperature Low Pressure Micro- and Nano-Imprint Lithography," U.S. Patent Application 09/976,681, Filed with USPTO on October 12, 2001.	—
	A57	WATTS et al., "Low Viscosity High Resolution Patterning Material," U.S. Patent Application 10/178,947, Filed with USPTO on June 24, 2002.	—
	A58	WATTS et al., "System and Method for Dispensing Liquids," U.S. Patent Application 10/191,749, Filed with USPTO July 9, 2002.	—
↓	A59	SREENIVASAN et al., "Method and System for Imprint Lithography Using an Electric Field," U.S. Patent Application 10/194,410, Filed with USPTO July 11, 2002.	—
LBT	A60	SREENIVASAN et al., "Step and Repeat Imprint Lithography Systems," U.S. Patent Application 10/194,414, Filed with USPTO July 11, 2002.	—

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